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ABSTRACT

A taxonomy of mathematical topics is given for the Mountain View School District Bilingual Diagnostic-Prescriptive Mathematics Program. The program consists of level K and levels 8 through 1, with level K being the least mathematically mature level and level 1 the most mature. The taxonomy includes concepts and activities involved within each level. (MN)

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Mountain View School District

Math Taxonomy

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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title III

SE 024 210

MOUNTAIN VIEW SCHOOL DISTRICT

TITLE III

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TITLE III

MOUNTAIN VIEW MATH TAXONOMY

Level K

K.0100: Sizes:

K.0101: Large, largest, smaller, smallest

K.0102: Shorter, shortest, longer, longest, taller, tallest

K.0103: Thicker, thinner

K.0200: Numerical Concepts:

K.0201: Recognition of 0 objects and the numeral 0

K.0202: Recognition of 1 object and the numeral 1

K.0203: Recognition of 2 objects and the numeral 2

K.0204: Recognition of 3 objects and the numeral 3

K.0205: Recognition of 4 objects and the numeral 4

K.0206: Recognition of 5 objects and the numeral 5

K.0207: Recognition of 6 objects and the numeral 6

K.0208: Recognition of 7 objects and the numeral 7

K.0209: Recognition of 8 objects and the numeral 8

K.0210: Recognition of 9 objects and the numeral 9

K.0211: All, some, none, no

K.0300: Writing of Numbers:

K.0301: Writing numbers 0-2

K.0302: Writing numbers 3-5

K.0303: Writing numbers 6-9

K.0400: Shapes:

K.0401: Circle, square, triangle-identification and recognition

K.0500: Position:

K.0501: Back, front, middle

K.0502: Top, bottom, side

K.0503: Behind, in front of, between

K.0504: Beside, next to, around

K.0505: Above, below, over, under

K.0506: Inside, outside

K.0507: Right, left

K.0508: First, last, beginning, end

K.0509: First, second, third

K.0600: Pre-Mathematics:

K.0601: Equal, unequal

K.0602: Same, different

K.0603: Not the same, not equal

K.0604: Combinations (color and shapes)

K.0605: Combination (shape and size)

K.0606: Combination (shape, position, size)

K.0700: Addition:

K.0701: Addition (one more than) to 5

K.0800: Subtraction:

K.0801: Subtraction (take away by 1) "ONE AWAY FROM FOUR"

K.0900: Time:

K.0901: Time-on the hour

TITLE III

MOUNTAIN VIEW MATH TAXONOMY

Level 8

8.0000: Level 8:

8.0100: Number and Numerical Concepts:

8.0101: Writing numerals 0 - 20

8.0102: Recognition of numerals 10 - 100

8.0103: Greater than, more than, less than, same and equals

8.0104: Sequence: Counting by 2's, 5's, and 10's

8.0105: Expanded notation (two places)

8.0106: Odd and even

8.0200: Measurement:

8.0201: Monetary units: penny, nickel, dime

8.0202: Liquid: pint, quart

8.0203: Time: hours, 1/4 and 1/2 hours

8.0204: Calendar: days (hours); week (number of days)

8.0205: Length: foot, inch

8.0206: Grouping: dozen

8.0300: Geometry:

8.0301: Recognition of basic shapes: circle, square, triangle

8.0400: Addition:

8.0401: Basic facts thru 9

8.0402: Basic facts 10 - 12

8.0403: Columnar, 1 digit addends, no renaming

8.0404: 1 digit addend and 2 digit addend, no renaming

LEVEL 8 - Continued

8.0500: Subtraction:

8.0501: Basic minuends thru 9

8.0502: Basic minuends 10 - 12

8.0503: 1 digit from 2 digit, no renaming

8.0504: 2 digit from 2 digit, no renaming

8.0800: Recognition of Fractions:

8.0801: Recognition of 1/2, 1/4, 1/3

TITLE III

MOUNTAIN VIEW MATH TAXONOMY

Level 7

7.0000: Level 7:

- 7.0100: Number and Numerical Concepts:
  - 7.0101: Recognition of whole numbers 101 to 999
  - 7.0102: Ordinal numbers (place of position)
  - 7.0103: Expanded notation 3 places
  - 7.0104: Symbols
  - 7.0105: Identity 3 - 0 = 3
  - 7.0106: Number lines
  - 7.0107: Roman numerals to 12
  - 7.0108: Estimation
- 7.0200: Measurement:
  - 7.0201: Money: Quarter, half dollar, dollar
  - 7.0202: Liquid: Gallon
  - 7.0203: Time: Nearest five minutes
  - 7.0204: Calendar: Year (months) year (days)
  - 7.0205: Length: Yard, miles
- 7.0300: Geometry:
  - 7.0301: Recognition of rectangle, rhombus
  - 7.0302: Idea of point, points on a line
  - 7.0303: Line, line segments
  - 7.0304: Row and column

Level 7 - continued

7.0400: Addition:

7.0401: Facts 13 - 18

7.0402: 1 digit addend and 2 digit addend, renaming

7.0403: 2 digit addends, renaming

7.0404: Word problems:

7.0500: Subtraction:

7.0501: Basic minuends 13 - 18

7.0502: 1 digit from 2 digit, renaming

7.0503: 2 digit from 2 digit, renaming

7.0504: 3 digit from 3 digit, no renaming

7.0505: Word problems

7.0600: Multiplication:

7.0601: Basic facts: 2's

7.0602: Basic facts: 5's

7.0603: Basic facts: 3's

7.0604: Basic facts: 0's and 1's

7.0605: Basic facts: 4's

7.0606: Word problems

7.0800: Recognition of Fractions:

7.0801: Fractions with numerator greater than 1: 2/4, 3/4, 2/3

TITLE III

MOUNTAIN VIEW MATH TAXONOMY

Level 6

6.000: Level 6

6.0100: Number and Numerical Concepts:

6.0101: Recognition of whole numbers 999 to 999,999

6.0102: Expanded notation to 4 places

6.0103: Approximation of whole numbers (ten and hundred)

6.0104: Graphing: Locating points

6.0105: Symbols

6.0106: Roman Numerals to L

6.0200: Measurement:

6.0201: Money: Dollar sign, decimal point

6.0202: Liquid: Pints and quarts in a gallon

6.0203: Time: Telling time to nearest minute

6.0204: Units of weight: Pound and ounces

6.0205: Length: 1/4 in., 1/2 in.

6.0300: Geometry:

6.0301: Properties of square, triangle, rectangle

6.0400: Addition:

6.0401: Columnar, 3 or more 2 digit addends, no renaming

6.0402: 3 digit addends, no renaming

6.0403: 3 digit addends, renaming to 10's

6.0404: 3 digit addends, renaming to 100's

6.0405: Word problems

6.0500: Subtraction:

- 6.0501: Subtraction, 3 digit from 3 digit numbers, renaming of 10's to 1's
- 6.0502: Word problems

6.0600: Multiplication:

- 6.0601: Mult., facts 6's
- 6.0602: Mult., facts 7's
- 6.0603: Mult., facts 8's
- 6.0604: Mult., facts 9's
- 6.0605: Mult., facts 10's
- 6.0606: Mult., 2 digit by 1 digit, multiplicand between 10 and 20, no renaming
- 6.0607: Mult., 3 digit by 1 digit, no renaming
- 6.0608: Mult., 2 digit by 1 digit, multiplicand between 10 and 20, renaming
- 6.0609: Word problems

6.0700: Division:

- 6.0701: Facts (2 and 3)
- 6.0702: Facts (4 and 5)
- 6.0703: Facts (6 and 7)
- 6.0704: Facts (8 and 9)
- 6.0705: 2 digit by 1 digit, quotient less than 20, no remainder
- 6.0706: 2 digit by 1 digit, quotient less than 20, with remainders
- 6.0707: Word problems

Level 6 Continued

6.0800: Addition of Fractions:

6.0801: Like denominators, sums less than 1, no renaming

6.0900: Subtraction of Fractions:

6.0901: Like denominators, no renaming

6.1200: Addition of Decimals:

6.1201: Dollars and cents

6.1300: Subtraction of Decimals:

6.1301: Dollars and cents

TITLE III

MOUNTAIN VIEW MATH TAXONOMY

Level 5

5.0000: Level 5

5.0100: Number and Numerical Concepts:

5.0101: Recognition of whole numbers thru hundred million

5.0102: Expanded notation - 5 place numerals

5.0103: Approximation of whole numbers (thousands)

5.0104: Roman Numerals C & M

5.0200: Measurement:

5.0201: Units of weight: Tons

5.0202: Perimeter

5.0300: Geometry:

5.0301: Angles

5.0302: Perpendicular lines

5.0303: Parallel lines

5.0304: Diagonal lines

5.0400: Addition:

5.0401: 3 digits, renaming to 10's and 100's

5.0402: Columnar, 3 and 4 digit addends, renaming

5.0403: Word problems

5.0500: Subtraction:

5.0501: 3 digits from 3 digits, renaming of 10's and 100's

5.0502: Word problems

Level 5 Continued

5.0600: Multiplication:

- 5.0601: Mult., 10 and 100 as factors
- 5.0602: Multiples of 10 and 100 as factors
- 5.0603: Mult., 2 digits by 1 digit, multiplicand greater than 20, renaming
- 5.0604: Mult., 3 digits by 1 digit, renaming to 10's
- 5.0605: Mult., 3 digits by 1 digit, renaming in all places
- 5.0606: Mult., 2 digits by multiples of 10, renaming
- 5.0607: Word problems

5.0700: Division:

- 5.0701: 3 digits by 1 digit, no remainder
- 5.0702: 3 digits by 1 digit, with remainders
- 5.0703: 2 digits by 2 digits, no remainders
- 5.0704: Word problems

5.0800: Addition of Fractions:

- 5.0801: Like denominators, sums renamed to 1
- 5.0802: Like denominators, sums improper fractions, renamed as mixed numbers
- 5.0803: Like denominators, sums renamed in simplest form
- 5.0804: Word problems

5.0900: Subtraction of fractions:

- 5.0901: Like denominators, mixed numbers from mixed numbers, no renaming
- 5.0902: Like denominators, rename in simplest form
- 5.0903: Like denominators, mixed number from mixed number, rename in simplest form
- 5.0904: Word problems

TITLE III

MOUNTAIN VIEW MATH TAXONOMY

Level 4

4.0000: Level 4

- 4.0100: Number and Numerical Concepts:
  - 4.0101: Number patterns
  - 4.0102: Equations
- 4.0200: Measurement:
  - 4.0201: Area
  - 4.0202: Measurement of temperature change
- 4.0300: Geometry:
  - 4.0301: Polygons (trapezoid, parallelogram)
  - 4.0302: Altitude
- 4.0400: Addition:
  - 4.0401: Columnar, 1 to 4 digit addends, renaming to 1,000's
  - 4.0402: Columnar, 4 and 5 digits, renaming
  - 4.0403: Word problems
- 4.0500: Subtraction:
  - 4.0501: 1 digit from multiples of 100
  - 4.0502: Subtraction of 4 digit numbers, renaming
  - 4.0503: Word problems
- 4.0600: Multiplication:
  - 4.0601: 2 digit by 2 digit numbers, factors between 10 and 20, renaming
  - 4.0602: 2 digits by 2 digits, renaming
  - 4.0603: 3 digits by 2 digits, renaming
  - 4.0604: Word problems

Level 4 Continued

4.0700: Division:

- 4.0701: 4 and 5 digit numbers by 1 digit, with and without remainders
- 4.0702: 2 digit by 2 digit, with and without remainders
- 4.0703: 3 digit by 2 digit, with and without remainders
- 4.0704: Word problems

4.0800: Addition of Fractions

- 4.0801: Like denominators, mixed numbers, sum renamed as mixed numbers
- 4.0802: Unlike denominators, sums in simplest form
- 4.0803: Mixed numbers, unlike denominators, sums in simplest form

4.0900: Subtraction of Fractions:

- 4.0901: Unlike denominators, answers in simplest form
- 4.0902: Fraction from mixed number, regroup the minuend, answer in simplest form
- 4.0903: Mixed number from mixed number, like denominators, regroup the minuend, answer in simplest form

4.1000: Multiplication of Fractions:

- 4.1001: Fraction with numerator of 1 by whole number
- 4.1002: Fraction by a fraction, numerators of 1
- 4.1003: Fraction with numerator more than 1 by fraction with numerator more than 1, renaming

4.1100: Division of Fractions:

- 4.1101: Fraction by fraction, numerators of 1
- 4.1102: Whole number by a fraction
- 4.1103: Fraction by a fraction, renaming

Level 4 Continued

4.1200: Addition of Decimal Fractions:

4.1201: Mixed decimal plus mixed decimal, to tenths, no renaming

4.1202: Mixed decimal plus mixed decimal, to tenths, renaming

4.1203: Mixed decimal plus mixed decimal, to hundredths, no renaming

4.1204: Word problems

4.1300: Subtraction of Decimal Fractions:

4.1301: Mixed numbers, to tenths, no renaming

4.1302: Mixed numbers, to tenths, renaming

4.1303: Word problems

TITLE III

MOUNTAIN VIEW MATH TAXONOMY

Level 3

3.0000: Level 3

- 3.0100: Number and Numerical Concepts:
  - 3.0101: Number patterns
  - 3.0102: Ratio and proportion
  - 3.0103: Percent
  - 3.0104: Average (mean)
  - 3.0105: Equations
- 3.0200: Measurement:
  - 3.0201: Length: 1/8", 1/16", with ruler
  - 3.0202: Convert units of length
- 3.0300: Geometry:
  - 3.0301: Circle and its parts: Radius, diameter, circumference
  - 3.0302: Volume of solids: Cubes, rectangular prism
- 3.0400: Addition:
  - 3.0401: 5 and 6 digit addends, renaming to ten thousands
  - 3.0402: Columnar addition, renaming
  - 3.0403: Word problems
- 3.0500: Subtraction:
  - 3.0501: 5 digits from 5 digits, renaming
  - 3.0502: 1 digit from multiples of 1000
  - 3.0503: Word problems
- 3.0600: Multiplication:
  - 3.0601: 4 digit by 2 digit, renaming
  - 3.0602: Word problems

Level 3 Continued

3.0700: Division:

3.0701: 5 digits by 2 digits, with and without remainders

3.0702: 3 digits by 3 digits, with and without remainders

3.0703: Word problems

3.0800: Addition of Fractions:

3.0801: 3 or more addends, like denominators, sums renamed in simplest form

3.0802: 3 or more addends, like denominators, sums renamed as mixed number in simplest form

3.0900: Subtraction of Fractions:

3.0901: Mixed number from mixed number, unlike denominators, regroup the minuend, renamed in simplest form

3.1000: Multiplication of Fractions:

3.1001: Mixed number times whole number, renamed in simplest form

3.1002: Mixed number times a fraction, renamed in simplest form

3.1100: Division of Fractions:

3.1101: Whole number by mixed number, rename in simplest form

3.1102: Mixed number by a whole number, rename in simplest form

3.1200: Addition of Decimal Fractions:

3.1201: Mixed number plus mixed number, to tenths and hundredths, renaming

3.1202: 3 or 4 addends, mixed numbers, to tenths and hundredths

3.1203: Word problems

3.1300: Subtraction of Decimal Fractions:

3.1301: Mixed number from mixed number, to tenths and hundredths

3.1302: Word problems

Level 3 Continued

3.1400: Multiplication of Decimal Fractions:

3.1401: Mult., 2 digits times dollar and cents, renaming

3.1402: Mult., whole number by tenths and hundredths renaming

3.1403: Mult., mixed number by tenths and hundredths, renaming

3.1500: Division of Decimal Fractions:

3.1501: Division of money by 2 digit whole number, no remainder

3.1502: Division of mixed number by whole number, no remainder

3.1503: Division of 3 digit whole number by tenths, no remainder

3.1504: Division of 3digit whole number by hundredths, no remainder

TITLE III

MOUNTAIN VIEW MATH TAXONOMY

Level 2

2.0000: Level 2

- 2.0100: Number and Numerical Concepts:
  - 2.0101: Prime numbers
  - 2.0102: Probability
  - 2.0103: Statistics (median and mode)
  - 2.0104: Integers
  - 2.0105: Factoring
  - 2.0106: Modular arithmetic
- 2.0200: Measurement:
  - 2.0201: Length: 1/32" with ruler
  - 2.0202: Adding and subtracting units of measurement
  - 2.0203: Surface area of cube and rectangular prism
- 2.0300: Geometry:
  - 2.0301: Recognition of polygons: hexagon, octagon, pentagon
  - 2.0302: Angles by name: acute, obtuse
  - 2.0303: Triangles by name: equilateral, isosceles, scalene
- 2.0400: Addition:
  - 2.0401: 6 and 7 digit addends, renaming
  - 2.0402: Columnar addition, 2 to 5 digit addends
  - 2.0403: Word problems
- 2.0500: Subtraction:
  - 2.0501: 6 digits from 6 digits
  - 2.0502: 1 and 2 digits from multiples of 10,000
  - 2.0503: Word problems

Level 2 Continued

2.0600: Multiplication:

2.0601: 3 digits by 3 digits

2.0602: Word problems

2.0700: Division:

2.0701: 6 digits by 2 digits, with and without remainders

2.0702: 4 digits by 3 digits, no remainders

2.0703: Word problems

2.0800: Addition of Fractions:

2.0801: Addition of fractions, 3 or more addends, unlike denominators, mixed numbers, sums renamed as mixed numbers in simplest form

2.0802: Word problems

2.0900: Subtraction of Fractions:

2.0901: Word problems

2.1000: Multiplication of Fractions:

2.1001: Mixed number times mixed number, answer in simplest form

2.1002: Word problems

2.1100: Division of Fractions:

2.1101: Mixed numbers by mixed numbers, answers in simplest form

2.1200: Addition of decimal Fractions:

2.1201: Decimal fraction and mixed decimal fraction to hundredths and thousandths, renaming

2.1202: Columnar addition, decimal fractions and mixed decimal fractions, renaming

2.1203 Word problems

Level 2 Continued

2.1300: Subtraction of Decimal Fractions:

2.1301: Mixed number from mixed number to thousandths

2.1400: Multiplication of Decimal Fractions:

2.1401: Mixed number times thousandths, renaming

2.1402: Tenths times hundredths

2.1500: Division of Decimal Fractions:

2.1501: Division of a 4 digit whole number by a mixed number, no remainder

2.1502: Division of a mixed number by a mixed number, no remainder

TITLE III

MOUNTAIN VIEW MATH TAXONOMY

Level 1

1.0000: Level 1

- 1.0100: Number and Numerical Concepts:
  - 1.0101: Exponents
  - 1.0102: Radicals
  - 1.0103: Scientific notation
  - 1.0104: Linear equations
  - 1.0105: Functions
  - 1.0106: Positive and negative numbers
  - 1.0107: Prime factorization
  - 1.0108: Set of counting, whole, rational and irrational numbers
  - 1.0109: Reciprocals
  - 1.0110: Symbols of operation: Parentheses and bar
  - 1.0111: Use of brackets and braces
  - 1.0112: Order of operations
- 1.0200: Measurement:
  - 1.0201: Volume of sphere, cone and cylinder
  - 1.0202: Surface area of sphere, cone and cylinder
- 1.0300: Geometry:
  - 1.0301: Congruence
  - 1.0302: Parts of a circle: Chord, segment, arc and sector
  - 1.0303: Pythagorean theorem
  - 1.0304: Graphing linear equations (Coordinates)
  - 1.0305: Measuring angles with protractor
  - 1.0306: Similar triangles
  - 1.0307: Use of compass (bisect angles, line segments)

Level 1 Continued

1.0400: Addition:

1.0401: Negative and positive numbers

1.0500: Subtraction:

1.0501: Positive and negative numbers from positive numbers

1.0502: Positive and negative numbers from negative numbers

1.0600: Multiplication:

1.0601: Negative and positive number times positive number

1.0602: Negative and positive number times negative number

1.0700: Division:

1.0701: Fractions as indicated division

1.0702: Positive and negative numbers by negative numbers in fractional form

1.0703: Positive and negative numbers by positive numbers in fractional form

1.1200: Decimal Fractions:

1.1201: Repeating decimals

1.1202: Terminating decimals

Name _____ Date _____

Level _____ Room _____

Mountain View Math Level Test

Level 8

☐

$\begin{array}{r} 3 \\ 2 \\ +1 \\ \hline \end{array}$ $\begin{array}{r} 25 \\ +3 \\ \hline \end{array}$ $\begin{array}{r} 38 \\ -2 \\ \hline \end{array}$ $\begin{array}{r} 46 \\ -33 \\ \hline \end{array}$

Level 7

☐

$\begin{array}{r} 36 \\ +5 \\ \hline \end{array}$ $\begin{array}{r} 63 \\ +18 \\ \hline \end{array}$ $\begin{array}{r} 52 \\ -26 \\ \hline \end{array}$ $\begin{array}{r} 456 \\ -123 \\ \hline \end{array}$ $\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$

Level 6

☐

$\begin{array}{r} 654 \\ +206 \\ \hline \end{array}$ $\begin{array}{r} 535 \\ +175 \\ \hline \end{array}$ $\begin{array}{r} 845 \\ -226 \\ \hline \end{array}$ $\begin{array}{r} 18 \\ \times 6 \\ \hline \end{array}$ $4\overline{)26}$

$\frac{1}{3} + \frac{1}{3} =$

Level 5

☐

$\begin{array}{r} 3,204 \\ 2,103 \\ +3,692 \\ \hline \end{array}$ $\begin{array}{r} 1,425 \\ -747 \\ \hline \end{array}$ $\begin{array}{r} 243 \\ \times 5 \\ \hline \end{array}$ $3\overline{)214}$

$14\overline{)42}$ $\frac{1}{4} + \frac{1}{8} =$ ☐ $12\frac{2}{3} - 2\frac{1}{3} =$ ☐

D. Siegrist

M.I.T.

Mountain View
Math
Level Test

KEY

Level 8

$$\begin{array}{r} 3 \\ 2 \\ +1 \\ \hline 6 \end{array} \qquad \begin{array}{r} 25 \\ +3 \\ \hline 28 \end{array} \qquad \begin{array}{r} 38 \\ -2 \\ \hline 36 \end{array} \qquad \begin{array}{r} 46 \\ -33 \\ \hline 13 \end{array}$$

Level 7

$$\begin{array}{r} 36 \\ +5 \\ \hline 41 \end{array} \qquad \begin{array}{r} 63 \\ +18 \\ \hline 81 \end{array} \qquad \begin{array}{r} 52 \\ -26 \\ \hline 26 \end{array} \qquad \begin{array}{r} 456 \\ -123 \\ \hline 333 \end{array} \qquad \begin{array}{r} 3 \\ \times 2 \\ \hline 6 \end{array}$$

Level 6

$$\begin{array}{r} 654 \\ +206 \\ \hline 860 \end{array} \qquad \begin{array}{r} 535 \\ +175 \\ \hline 710 \end{array} \qquad \begin{array}{r} 845 \\ -226 \\ \hline 619 \end{array} \qquad \begin{array}{r} 18 \\ \times 6 \\ \hline 108 \end{array}$$

$4\overline{)26}$ = 6 r2, -24, 2

$\frac{1}{3} + \frac{1}{3} =$

Level 5

$$\begin{array}{r} 3,204 \\ 2,103 \\ +3,692 \\ \hline 8,999 \end{array} \qquad \begin{array}{r} 1,425 \\ -747 \\ \hline 678 \end{array} \qquad \begin{array}{r} 243 \\ \times 5 \\ \hline 1,215 \end{array}$$

$3\overline{)214}$ = 71 r1

$14\overline{)42}$ = 3, 28

$\frac{1}{4} + \frac{1}{8} = \boxed{\frac{3}{8}}$

$12\frac{2}{3} - 2\frac{1}{3} = \boxed{10}$

D. Siegrist

Level 4

$$\begin{array}{r} 12,601 \\ 23,546 \\ 32,178 \\ +41,305 \\ \hline 109,630 \end{array}$$

$$\begin{array}{r} 3,206 \\ -2,347 \\ \hline 859 \end{array}$$

$$\begin{array}{r} 22 \\ \times 55 \\ \hline 1,210 \end{array}$$

$$\begin{array}{r} 326 \\ \times 26 \\ \hline 8,476 \end{array}$$

$$24\overline{)597} \quad 24 \text{ r } 21$$

$4\frac{1}{3} + 3\frac{2}{6} = \boxed{7\frac{2}{3}}$ or $7\frac{4}{6}$

$$\begin{array}{r} 4.32 \\ +3.31 \\ \hline 7.63 \end{array}$$

$$\begin{array}{r} 3.7 \\ -1.8 \\ \hline 1.9 \end{array}$$

$8\frac{1}{6} - 3\frac{5}{6} = \boxed{4\frac{2}{6}}$ or $4\frac{1}{3}$

Level 3

$$\begin{array}{r} 63,073 \\ +48,094 \\ \hline 111,167 \end{array}$$

$$\begin{array}{r} 6,000 \\ -9 \\ \hline 5,991 \end{array}$$

$$\begin{array}{r} 3,497 \\ \times 68 \\ \hline 237,796 \end{array}$$

$$217\overline{)659} \quad 3 \text{ r } 8$$

$\frac{2}{8}$

$\frac{1}{8}$

$2\frac{1}{4} \times 2 = \boxed{4\frac{2}{4}}$ or $4\frac{1}{2}$

$$\begin{array}{r} 13.07 \\ -5.10 \\ \hline 7.97 \end{array}$$

$$\begin{array}{r} +\frac{3}{8} \\ \hline \end{array}$$

$\frac{6}{8}$ or $\frac{3}{4}$

$$\begin{array}{r} \$8.72 \\ \times 45 \\ \hline \$392.40 \end{array}$$

$$\begin{array}{r} 4.24 \\ \times .6 \\ \hline 2.54 \end{array}$$